

CLAIMS

1. A heat exchanger of a ventilating system, comprising:
heat exchange plates which are laminated at a predetermined interval;
first vibration members which are laminated among the heat exchange
5 plates, for generating turbulence in outdoor air passing through a first air path,
being aligned in the first air path through which the outdoor air passes; and
second vibration members for generating turbulence in the indoor air
passing through a second air path, being aligned in the second air path through
which indoor air passes.

10

2. The exchanger of claim 1, further comprising:
first partitions which are respectively attached on the both side surfaces
of the heat exchanger through which the outdoor air passes, for closing the side
surface where the second vibration member is aligned; and
15 second partitions which are respectively attached on the other both side
surfaces of the heat exchanger through which the indoor air passes, for closing
the side surface where the first vibration member is aligned.

3. The exchanger of claim 1, wherein the first and second vibration
20 members include a fixing portion which is attached on the upper surface of the
heat exchange plate, and a vibration portion which is curved at a predetermined
angle from the fixing portion, for generating turbulence in the flowing air.

4. The exchanger of claim 3, wherein the first and second vibration members are formed with an elastic body having a predetermined elasticity that the vibration portion is bent to the rear direction when the air is collided with a front surface thereof.

5

5. The exchanger of claim 3, wherein the first and second vibration members are formed with metal materials having a predetermined elasticity.

6. The exchanger of claim 3, wherein the first and second vibration
10 members are formed with paper materials having a predetermined elasticity.

7. The exchanger of claim 3, wherein the first and second vibration members are formed with plastic materials having a predetermined elasticity.

15 8. The exchanger of claim 3, wherein first row vibration members are aligned on the upper surface of the heat exchange plate at a predetermined interval, second row vibration members are aligned at the rear of the first row vibration members from at a predetermined interval from the first row vibration member, the first and second vibration members are repeatedly aligned at an identical interval, and the second row vibration member is positioned among the
20 first row vibration members.

9. The exchanger of claim 8, wherein if the interval among the vibration

16

members of the first row portions and second row portions is d1 and the interval among the vibration members of the first row portions and second row portions is d2, the formula of $5 \leq d2/d1 \leq 10$ is satisfied.

5 10. The exchanger of claim 8, wherein if the width of the vibration members of the first row portions and second row portions is L1 and the width of the vibration members of the first row portions and second row portions is L2, the formula of $1 \leq L1/L2 \leq 5$ is satisfied.

10 11. The exchanger of claim 8, wherein if the thickness of the vibration members of the first row portions and second row portions is t1 and the thickness of the heat exchange plates is t2, the thickness of the first row portions and second row portions and the thickness of the heat exchange plates satisfy a formula of $0.5 \leq t2/t1 \leq 1$.

15